## RECLAMATION Managing Water in the West

FINDING OF NO SIGNIFICANT IMPACT, DECISION AND ENVIRONMENTAL ASSESSMENT

WATER SERVICE CONTRACT RENEWAL FOR FRANK ROBBINS

BOYSEN UNIT
PICK-SLOAN MISSOURI BASIN PROGRAM





Department of the Interior Bureau of Reclamation Wyoming Area Office Mills, Wyoming

November 2014

#### **MISSION STATEMENTS**

#### **Department of the Interior**

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

#### **Bureau of Reclamation**

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

#### FINDING OF NO SIGNIFICANT IMPACT

## WATER SERVICE CONTRACT RENEWAL for FRANK ROBBINS

BOYSEN UNIT
PICK-SLOAN MISSOURI BASIN PROGRAM

FONSI # <u>WY-4000-15-02</u>



Department of the Interior Bureau of Reclamation Great Plains Region Wyoming Area Office

#### FINDING OF NO SIGNIFICANT IMPACT

### WATER SERVICE CONTRACT RENEWAL for FRANK ROBBINS

#### FONSI # WY-4000-15-02

#### **PROPOSED ACTION**

Reclamation is proposing to renew a long-term water service contract with Frank Robbins (Contractor).

#### **BACKGROUND**

In 1973, the Bureau of Reclamation (Reclamation) entered into Contract No. 14-06-600-840A with Eli Talovich, Jr., which provided for supplemental water service from storage in Boysen Reservoir and contained a provision which provided for the renewal of the contract with terms and conditions mutually agreeable to the parties at the time of renewal. The contract was transferred to Frank Robbins in 2007.

Under the proposed alternative, there will be no change in method of operations. Existing delivery facilities will be used with no modifications and no land use changes are proposed. Historically, the Contractor has been allowed to divert up to 160 acre-feet of supplemental irrigation water from Boysen storage for the irrigation of 105.9 acres. The proposed alternative will allow the contract to be renewed for a 40-year term.

An appropriate water service charge will be established in the contract. The negotiable water service charge will be calculated on a per acre-foot basis. In addition, the contractor will pay an annual billing and accounting charge, and an annual amount on a per acre-foot basis for operation, maintenance and replacement (OM&R) costs of Boysen Dam and Reservoir allocated to irrigation. The Contractor is obligated to make the above payments annually regardless of the amount of water actually used by the Contractor.

This alternative is the proposed alternative and consistent with the Reclamation Project Act of 1939 Section 9(e) which permits Reclamation to enter into a contract to furnish water for irrigation purposes at such rates which "will produce revenues at least sufficient to cover an appropriate share of the annual O&M cost and an appropriate share of such fixed charges..." and the Act of July 2, 1956, which provides for the renewal of water service contracts entered into under Section 9(e) of the Reclamation Project Act of 1939.

#### **DECISION**

Based on the analysis presented in the environmental assessment, Reclamation concludes that a Finding of No Significant Impact (FONSI) is appropriate and an environmental impact statement is not needed because:

- 1. Renewing the contract results only in administrative or financial changes. The water service contract renewal will not affect Contractor or Reclamation operations.
- 2. The contract renewal will not change the hydrology, quantity and/or timing of the supplemental water supply for irrigation. The Contractor will continue to use supplemental storage water from Boysen Reservoir as that supplemental storage water which has been used historically.
- 3. The contract renewal would not change current conditions for land use, vegetation, fish and wildlife, threatened or endangered species, and cultural resources.
- 4. Climate change is not anticipated to affect water service obligations. Should the regional (basin) climate measurably or noticeably change under the proposed alternative, Reclamation and the Contractor will adapt to the change.
- 5. Environmental justice issues have not been identified regarding this water service contract renewal in the area or within the Contractor acreage.
- 6. The contract renewal will not affect tribal water rights or other Indian Trust Assets. This contract renewal is subject to the future development of Native American Reserved Water Rights and may be terminated should the Secretary of the Interior or judicial decisions determine that it infringes on such rights.

Approved:

Carlie Ronca

Wyoming Area Manager

Date

# ENVIRONMENTAL ASSESSMENT WATER SERVICE CONTRACT RENEWAL for FRANK ROBBINS

BOYSEN UNIT PICK-SLOAN MISSOURI BASIN PROGRAM



U.S. Department of the Interior Bureau of Reclamation Great Plains Region Wyoming Area Office Mills, Wyoming

November 2014

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## ENVIRONMENTAL ASSESSMENT WATER SERVICE CONTRACT RENEWAL FOR FRANK ROBBINS

#### 1. Introduction

#### **Purpose and Need**

This Environmental Assessment (EA) has been prepared to assess the environmental effects of renewing the water service contract with Frank Robbins (Contractor).

In 1973, the Bureau of Reclamation (Reclamation) entered into Contract No. 14-06-600-840A with Eli Talovich, Jr., which provided for supplemental water service from storage in Boysen Reservoir and contained a provision which provided for the renewal of the contract with terms and conditions mutually agreeable to the parties at the time of renewal. The contract was transferred to Frank Robbins in 2007.

The purpose of this action is to renew the long-term contract which would allow Reclamation to continue to provide water service for irrigation to the Contractor.

#### **Background and Location**

The Boysen Unit of the Pick-Sloan Missouri Basin Program is located on the Wind River about 20 miles south of Thermopolis, Wyoming, and consists of Boysen Dam, reservoir and powerplant. The dam and powerplant were constructed between 1947 and 1952 for flood control, power generation, irrigation, recreation, and fish and wildlife. Boysen Reservoir is essential to irrigation in the Wind River Basin above the reservoir and the Bighorn Basin below the reservoir. Water is supplied from Boysen Reservoir via the Bighorn River to downstream water users, and via the Wind River to upstream water users by exchange.

The Boysen Unit was authorized by the Flood Control Act of December 22, 1944, Public Law 534. Boysen Reservoir has a capacity of about 741,594 acre-feet of water at elevation 4725, the top of the joint use pool, and has a water surface area of 19,560 acres. The amount allocated for active conservation is 378,184 acre-feet; and 144,229 acre-feet is allocated for joint-use flood control storage for a total of 522,413 acre-feet. All of the joint-use space is located between elevation 4717 and 4725 which is the top of the spillway gates when closed.

There are both government and private irrigation districts in the Wind River and Bighorn Basins, as well as private individual irrigators, such as the Contractor. The WYAO has about 28 standing contracts for water service in the Bighorn Basin and also a varying number of

temporary water service contracts from year to year. There is over 50,000 AF of water under long term contracts for Boysen Reservoir storage, and a range of 0-16,000 AF for temporary water service contracts for the years 2009-2013.

The physical setting of the Contractor's land is approximately 4 miles south of Thermopolis, Wyoming, in a semi-arid intermountain desert basin with the elevation of irrigated lands at about 4,400 feet above mean sea level. The Bighorn Basin contains nearly 7,693,000 acres in which 7,189,200 acres are in Wyoming.

The Contractor's lands are primarily gently sloping lands consisting of soils in the Dwyer variant-Dobent complex, Kishona-Keeline complex and Neville soil series. These soil series originate as alluvium derived from sedimentary rock and are generally well-drained and comprise of loamy and sandy soils.

Thermopolis experiences a semi-arid climate with cold, dry winters, and hot dry summers. The area receives an average of about 12 inches of precipitation a year. Average snowfall is approximately 42 inches a year. Temperature extremes range from 104°F in the summer to -37°F in the winter with an annual average of 48°F. The growing season is approximately 110 days extends from early May to late September.

#### Authority

Section 9(e) of the Reclamation Project Act of 1939 provides Reclamation with the authority to enter into water service contracts for irrigation. Section 9(e) states in part "... the Secretary, in his discretion, may enter into either short or long term contract to furnish water for irrigation purposes."

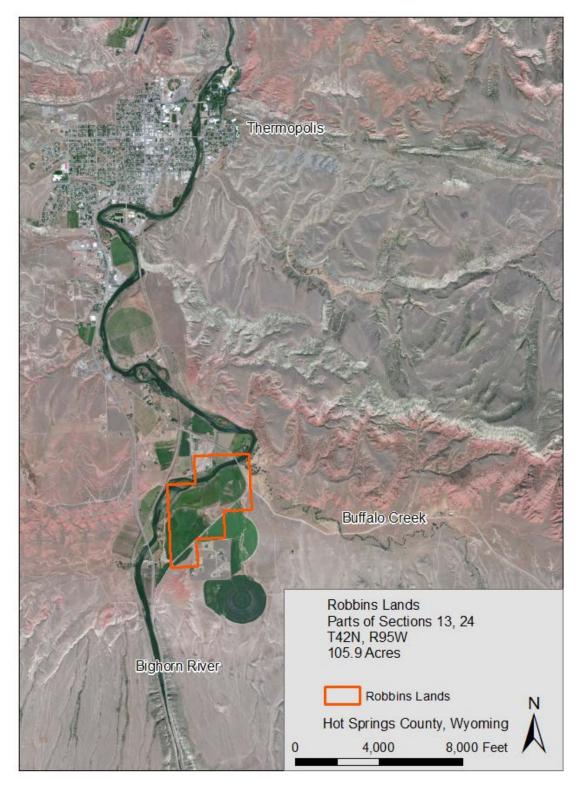


Figure 1. General location area of Frank Robbins lands.

#### 2. Alternatives

#### Proposed Alternative: Renew Water Service Contracts with Changes in Contract Articles

One alternative for the Contractor was considered when preparing this environmental assessment. When provisions specifically for the renewal of a contract are present in the contract, renewal of the contract is a non-discretionary federal action as long as the contractor requested the renewal of the contract. Therefore, the contract renewal is considered a federal non-discretionary action. Since there was a provision in the original contract which allowed for contract renewal, the contract can be renewed according to terms and conditions mutually agreeable to both parties and according to laws and policies in effect at the time of renewal.

The proposed alternative would allow the contract to be renewed for a 40-year term. New water service contract articles would supersede and replace Articles 1-15 of the existing contract. These articles refer to the water service portion of the new contract regarding the Contractor's water supply obligations. Standard articles (Articles 9-24) in the new contract are subject to current Reclamation laws and policies in effect at the time of renewal and are not negotiable. This contract renewal is subject to the future development of Native American Reserved Water Rights and may be terminated should the Secretary of the Interior or judicial decisions determine that it infringes on such rights.

Under the proposed alternative, there would be no change in method of operations. Existing delivery facilities would be used with no modifications and no land use changes are proposed. The Contractor would be allowed supplemental irrigation water of that amount which has been historically delivered to the Contractor, if available, for irrigation. The amount of water that may be delivered to the Contractor in any one year is 160 acre-feet of supplemental storage to irrigate 105.9 acres of land.

An appropriate water service charge would be established in the contract. A negotiable water service charge would be calculated on a per acre-foot basis. In addition, the Contractor would pay an annual billing and accounting charge, and an annual amount on a per acre-foot basis for operation, maintenance and replacement (OM&R) costs of Boysen Dam and Reservoir allocated to irrigation. The Contractor is obligated to make the above payments annually regardless of the amount of water actually used by the Contractor.

This alternative was selected as the proposed alternative to meet Reclamation requirements pursuant to the Reclamation Project Act of 1939 Section 9(e) which allows Reclamation to enter into a contract to furnish water for irrigation purposes at such rates which "will produce revenues at least sufficient to cover an appropriate share of the annual O&M cost and an appropriate share of such fixed charges..." and the Act of July 2, 1956, which provides for the renewal of water service contracts entered into under Section 9(e) of the Reclamation Project Act of 1939.

#### 3. Affected Environment and Environmental Consequences

This section addresses the existing environment and the environmental consequences of the proposed alternative. Environmental effects associated with renewing the water service contract were evaluated.

#### Hydrology

The Contractor has natural flow water rights on the Bighorn River with beneficial use purposes for irrigation. Currently, the Contractor utilizes water from Boysen storage to supplement the natural flow for irrigation. Water is furnished to the Contractor at the outlet works of Boysen Dam for irrigation purposes. The Contractor uses transferred works canals to convey water to lands adjacent to the Bighorn River.

Because the Contractor contracts for a relatively minor amount (160 acre-feet), Reclamation does not perform storage water accounting and assumes the Contractor takes the full contract amount each year. This assumption would continue upon contract renewal. The renewal of this contract would allow the Contractor to divert the amount of supplemental irrigation water provided under the original contract; such diversions shall not exceed the contracted amount.

Renewing the contract would not affect the hydrology, quantity and/or timing of the supplemental water supply for irrigation. Changes from the original contract are administrative and financial changes only.

Reclamation policy mandates inclusion of water measurement language in all future long- and short-term water service and repayment contracts and amendments of existing contracts. The language in the new contract shall provide for the measurement and reporting of the source and quantity of water for which the Contractor is entitled. The Contractor currently has water measuring devices to measure the quantity of water diverted. The Contractor is exempt from preparing a water conservation plan as mandated by the Reclamation Reform Act because they are under the 2000 acre threshold set in the Reclamation Manual Directives and Standards WTR 01-01.

#### **Socioeconomics**

Robbins' lands are located approximately 4 miles south of Thermopolis, Wyoming. Thermopolis, population about 3000, is the county seat for Hot Springs County which has a population of about 4,812. Other established towns in Hot Springs County includes Kirby, population 92, approximately 12 miles north of Thermopolis, and East Thermopolis, population 254, located on the east side of the Bighorn River from Thermopolis. The economy of the area is based on tourism and agriculture. Hot Springs State Park is located on the northwest end of town and is one of Wyoming's busiest parks and receives about 900,000 visitors each year. Other

tourism-related businesses in and near the town include the Wyoming Dinosaur Center and Wind River Canyon Whitewater rafting, as well as the Hot Springs County Museum and Cultural Center.

There was a total of 28,114 acres of cropland in Hot Springs County according to the 2012 National Agricultural Statistics Service (NASS, 2012). Of these, about 12,612 acres were irrigated. The main crops in Hot Springs County were forage land (hay and haylage, grass silage, and greenchop), and barley for grain. Crop sales accounted for about \$2,091,000 and livestock sales accounted for \$14,354,000 of the total agricultural market value for the county in 2012. The Contractor's acreage irrigated with a federal supplemental water supply is 105.9 acres, approximately 0.8% of the total irrigated acreage for the county.

Since 1973, the Robbins' have been assessed an annual water service charge of \$1.25 for 160 acre-feet of water to irrigate 105.9 acres under the original contract.

Under the proposed alternative, the Contractor would continue to be provided supplemental storage water from Boysen Reservoir in an amount historically delivered, if available, for irrigation.

The renewed contract would establish the following payments:

- 1) A water service payment;
- 2) An annual OM&R payment; and
- 3) An annual billing and accounting charge

The Contractor would be obligated to make the above payments annually regardless of the amount of water actually used. The amounts established for these costs are not expected to result in a hardship for the Contractor. The Contractor understands that the government is obligated to receive payment for the cost of providing water. The annual water service charge, OM&R cost, and billing and accounting charge are expected to be reasonable for the Contractor and allow the government to receive payment for the water service provided.

The United States has determined that water is currently available from Boysen Reservoir to provide the Contractor's water needs subject to future development of Native American reserved water rights and the final adjudication of water rights in the Bighorn Basin under the Bighorn Basin General Adjudication. This contract renewal is subject to the future development of Native American Reserved Water Rights and may be terminated should the Secretary of the Interior or judicial decisions determine that it infringes on such rights.

Federal agencies are to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations, and allow all portions of the population a meaningful opportunity to participate in the development of, compliance with, and enforcement of Federal laws, regulations and policies, affecting human health or the environment regardless of race, color, national origin or income. If a minority or low-income population is identified,

appropriate outreach actions will be initiated to ensure dissemination of information and participation.

Environmental justice issues have not been identified regarding this water service contract renewal in the area. The proposed alternative would not disproportionately impact or affect low income or minority groups.

The proposed contract renewal reflects administrative and financial changes only. They do not affect the Contractor's or Reclamation operations.

#### Land Use

Land uses along the Bighorn River and the Contractor's area include recreation and wildlife habitat at higher elevations, and agricultural uses such as field crops and cropping of hayfields along the floodplain, and grazing. Main crops include forage-land (hay, haylage, grass silage and greenchop), and barely for grain. Crop production in the area is combined with livestock production. Livestock fattening operations provide a substantial part of farm income in the area. Feed grains and alfalfa hay are marketed mostly through livestock feeding operations.

Recreation activities such as fishing, hunting, camping, hiking, and horseback riding, could occur near the Contractor's area and the Bighorn River.

The proposed alternative of renewing the contract would not change land uses in the area. Land would continue to be used for recreation, wildlife, agriculture, and grazing. Cropping patterns are not anticipated to change. Renewing the contract would result only in administrative or financial changes.

#### Vegetation

Upland vegetation south of Thermopolis consists of sagebrush species, rabbitbrush, prickly pear cactus, greasewood, wheatgrass, and ricegrass. Cottonwood, Russian olive and willow trees inhabit areas in drainages. In addition, wetland and riparian habitats can be formed by deep percolation from irrigation and/or seepage from laterals. Wetland and riparian vegetation consists of willow, bulrushes, cattails, sedges, and water associated grasses. These habitat types are generally not found in the arid sagebrush-grass type of the area, however, the Contractor's lands are located adjacent to the Bighorn River where some riparian habitat exists.

The proposed alternative of renewing the Contractor's water contract would not change present vegetative uses. Water service to supplement the natural flow to the Contractor would continue. Existing wetland and riparian areas along canals, ditches and laterals, as well as riparian areas along the river, would not be affected by the contract renewal as the contract renewal would only result in administrative or financial changes.

#### Fish and Wildlife

Big game animals in the area include pronghorn, mule deer, white-tailed deer, and elk. Desert cottontail rabbit is a common small game animal found in the area. Predators such as the coyote and red fox and furbearers such as the bobcat and badger can be found in most habitat types in the area. Beaver, muskrat and mink can be found along creeks and rivers and other aquatic habitats in the area. A variety of small mammals such as the least chipmunk, Wyoming ground squirrel, red squirrel, bushytail woodrat, and deer mouse are likely to occur in the area.

Waterfowl such as mallard, gadwall, pintail, blue-winged teal, wood duck, common merganser and Canada geese are likely to be observed on or near the Contractors' lands and nest in the denser cover near the river, canals, and wetlands. Grain crop residues provide important winter foods for most of these waterfowl.

Upland game birds such as ring-necked pheasant, Hungarian partridge, wild turkey, mourning dove and chukar may be observed. Raptors which could be observed include the red-tailed hawk, American kestrel, and great horned owl. Nongame birds commonly found in the area are Brewer's and red-winged blackbirds, crow, black-billed magpie, nighthawks, horned larks, and western meadowlarks.

Reptiles that could be found in the area include spotted lizards, bullsnakes, and rattlesnakes.

The Bighorn River in the vicinity of the Contractor was classified by the WDEQ as Class 2AB water with use designations for drinking water, game and non-game fish, fish consumption, other aquatic life, recreation wildlife, agriculture, industry, and scenic values.

The primary species of fish in this area are the white sucker, carp, shorthead redhorse and river carpsucker with an occasional brown and rainbow trout, burbot, and flathead chub. The WGF stocks rainbow trout in Boysen Reservoir and below the dam in the Bighorn River.

The proposed alternative of renewing the contract would not change present fish and wildlife conditions. Boysen Reservoir, the Bighorn River, and the area where the Contractor is established would continue to provide habitat for upland species and wintering waterfowl. Populations and distributions of fish and wildlife species are not expected to change. Renewing the contract would result only in administrative or financial changes.

#### Threatened and Endangered Species

The U.S. Fish and Wildlife Service (Service) uses the Information, Planning, and Conservation (IPaC) decision support system to provide the public and other agencies with a list of threatened, endangered and candidate species that may occur in the area when an action is proposed. A document generated by the IPaC support system and referenced by the Service as Consultation Tracking Number: 06E13000-2015-SLI-0008 for the Robbins' lands is included in Attachment A. This document lists endangered and threatened and candidate species occurring in Hot

Springs County, Wyoming that may occur in the area of the proposed action and fulfills the Service's requirement under Section 7(c) of the Endangered Species Act to provide a list of endangered and threatened species upon request.

One federally listed threatened species and one candidate species were identified as potentially occurring within the vicinity of the Contractor's land near Thermopolis, Wyoming. These species include the Ute ladies'-tresses (*Spiranthes diluvialis*), and the greater sage-grouse (*Centrocercus urophasianus*).

Ute ladies'-tresses is a federally listed threatened plant species. The Ute ladies'-tresses occurs in Converse, Goshen, Laramie and Niobrara Counties in southeastern Wyoming. It is found mostly on low, flat floodplain terraces or abandoned oxbows within 0.5-50 meters of small perennial streams or rivers. These sites are subirrigated, often seasonally flooded, and remain moist into the summer. The Ute ladies' tresses use habitat of flat floodplain terraces or abandoned oxbows within close proximity to perennial streams or rivers. Renewing the contract would have no effect on the Ute ladies' tresses because the lands are under existing agricultural activities. In addition, no new surface disturbances of agricultural cropland are anticipated.

The greater sage-grouse is a federally listed candidate species that may occur in the area. The Service has determined that the greater sage-grouse warrants listing under the Endangered Species Act, but the development of a proposed listing rule was precluded by other higher priority listing actions. The State of Wyoming has issued Executive Order 2011-5 Greater Sage-Grouse Core Area Protection to ensure greater sage-grouse conservation. The WGF and the Service developed core and distribution areas and management strategies to coordinate on-going efforts to conserve the greater sage-grouse and preclude the need for listing the bird as a threatened or endangered species. The Robbins' lands considered for this contract renewal are not within greater sage-grouse Core Population Areas and are under existing agricultural activities. No further review of the greater sage-grouse is necessary for these lands. Renewal of the contract would have no adverse effect on the greater sage-grouse.

The proposed alternative would not affect present threatened or endangered species. Renewing the contracts would only result in administrative or financial changes.

#### **Cultural Resources**

The Robbins lands are situated in the Bighorn River valley of the Bighorn Basin, approximately four miles south of Thermopolis, adjacent to the Bighorn River and near U.S. Highway 20, in Sections 13 and 24 of T. 42 N., R. 95 W., 6<sup>th</sup> P.M., Hot Springs County, Wyoming.

A working definition of cultural resources as found in Bureau of Reclamation Manual LND P01 (Reclamation, 2013a) is "any prehistoric and historic district, site, building, structure, or object, cultural landscape, sacred site, and traditional cultural property." Within this broad spectrum are those of recognized importance such that they qualify for listing in the National Register of Historic Places (NRHP) based upon formal determination by the Secretary of the Interior or the

Bureau of Reclamation in consultation with the appropriate State or Tribal Historic Preservation Officer (SHPO/THPO). Such NRHP-eligible values (including artifacts, records and remains that are associated or located therein) are called "historic properties." With this in mind, following is a brief assessment of the potential of the Robbins parcel to contain cultural resources of a prehistoric archaeological or historical nature.

According to the *Geologic Map of Wyoming* (Love and Christiansen 1985), the entire Robbins parcel located in the N½NE¼, SW¼NE¾, E½NW¼ and NE¼SW¾ of Section 24 (240 acres) is situated within Quaternary Period (Pleistocene and Holocene Epochs) alluvium and colluvium.

Love and Christensen also indicate that the Robbins parcel located in the S½SE¼ of Section 13 is Quaternary alluvium and colluvium, with the exception of Triassic Period Chugwater and Dinwoody Formations extending slightly into the western portion of an 80 acre parcel. The Chugwater Formation is described as red siltstone and shale, with an Alcova Limestone Member in the upper part and thin gypsum partings near the base (lower part) of the formation. The Dinwoody Formation is described as olive-drab hard dolomitic thin-bedded siltstone.

For years the best potential for the discovery of prehistoric archaeological sites has been focused upon Holocene soils, based upon the idea that prehistoric man did not populate North America until some 10,000 to 12,000 years ago. However, over four decades of archaeological research and discoveries in North and South America strongly suggest that prehistoric Indians populated the New World several thousand years earlier than previously believed. No longer can late Pleistocene soils be categorically ruled out as regards potential for Paleoindian sites.

Based upon past archaeological field investigations conducted in Wyoming's Bighorn Basin over several decades, it is reasonable to believe that human occupation in the vicinity of the proposed Robbins water service contract renewal area of potential effects occurred at some time during the Holocene Epoch and perhaps even during Pleistocene times; that evidence of ancient human occupation might be buried in such unconsolidated Quaternary alluvial/colluvial deposits, or within aeolian (wind-blown) or thinly developed Holocene soils that may overly the nearby Chugwater and Dinwoody Formations.

The real question is whether or not any such archaeological materials have been preserved intact within the Robbins parcel (or the probability of such preservation), as erosion over millennia and/or modern development uses can erase evidence of such prehistoric occupation. This question can be answered only (with certainty) by conducting Class III inventories and/or archaeological testing.

According to Frison (1991), the Bighorn Basin is included in the Northwestern Plains Culture Area, which was home to various Native American tribes during the prehistoric Paleoindian Period, the Early, Middle and Late Archaic Periods, the Late Prehistoric Period, and during the Protohistoric and Historic Periods. With the near extinction of bison upon which the Indians depended, contributing to the defeat of the Indians tribes by the U.S. Army in the latter part of the 19th Century, and the removal the tribes to various reservations, the only indication of prior

Indian occupation was the remnants of their material culture left on the ground, in some cases buried by fluvial or aeolian forces and later re-exposed to view by erosion. Prehistoric archaeological sites that might be found in the project area vicinity would be indicative of nomadic hunters and foragers, and typically could include stone circles from abandoned tipi campsites (and associated activity areas), fire hearths and burned/cracked rock, surface scatters of chipped stone (lithic) tools and debitage, ground stone, occasional crude pottery shards, and toolstone sources/quarries.

By way of comparison, buried archaeological materials associated with midwestern Native American sedentary horticulturalist-hunters (who lived in permanent villages [Plains Woodland and Plains Village Traditions] farming such crops as maize, beans, squash, pumpkins, sunflowers and tobacco) occasionally become exposed to view during modern-day plowing and farming. In some cases, these archaeological materials are buried deeply enough to escape complete destruction, whereby their scientific data potential can be recovered through archaeological excavation. In contrast, because the nomadic hunter-gatherers who occupied the Bighorn Basin practiced little or no agriculture (with no associated need for permanent settlements), archaeological evidence of their presence tends to be more transient and shallow, and less likely to survive intact over the centuries.

It is possible that portions of the Robbins lands were farmed long before Reclamation awarded the first water service contract (now expired) for them in 1973, in which case they would have been subject to significant surface disturbance for years. Based upon aerial photos (Bing and Google Earth), most of the Robbins parcel has experienced significant ground disturbance associated with irrigation and cultivation. Such surface disturbance would have had a detrimental or destructive effect upon any cultural resources (prehistoric archaeological and/or historical era sites or materials) located in the plow/irrigation zones or other vehicle use and ground disturbance areas.

Historic era (post-1800 A.D.) sites typical for this part of the Bighorn Basin include historic roads, standing structures or foundations associated with early homesteading and ranching, early privately-constructed irrigation canals, early railroads and associated community remains, trash and debris scatters. Early exploration/fur-trade era sites are less likely to be found due to the short-term duration of occupation at those sites, difficulty in determining exactly where they occurred from sketchy historical accounts, and a century and a half of cumulative effects of landaltering developments of various kinds. Expansion and Depression Era homestead remains may be encountered in the vicinity, often in the form of debris and trash scatters and building foundations, but standing buildings and structures may still survive in some locations.

Files search information provided on October 7, 2014, by the Wyoming SHPO Cultural Records Office (CRO) for the Robbins lands indicates that during the period 1981 -2010, five Class III inventories have been conducted for projects within or in the close proximity of the Robbins parcel: three in Section 13, T. 42 N., R. 95 W. and two in Section 24, T. 42 N., R. 95 W. Acreage inventoried for these projects (water pipeline, electrical transmission line, buried telephone cable, and a highway bridge evaluation) is not provided in the CRO files search

results, but is likely limited to a few linear acres within or adjacent to the Highway 20 right-of-way.

Cultural resources identified in the vicinity, but not within the Robbins parcel area of potential effects (APE) include:

48BO409 – a NRHP-unevaluated highway bridge across the Burlington Northern Railroad (formerly the Burlington, Chicago and Quincy Railroad)

48HO492 – the Burlington, Chicago and Quincy Railroad, considered NRHP-unevaluated and near the northwest corner of the Robbins parcel.

Cultural resources identified within the Robbins parcel boundary, but outside/beyond the lands to be irrigated (project APE) include:

48HO381 – the NRHP-listed Four Mile Bridge over the Bighorn River, located within the Old Highway 20 Right of Way (ROW)

48HO208 -- a segment of the Birdseye Pass Stage Road, considered unevaluated for the NRHP, now part of the Old Highway 20 ROW where it crosses the Bighorn River at Four Mile Bridge.

While it is unlikely that there are any intact archaeological resources located within areas that have been previously cultivated, it is possible that there could be archaeological sites or materials in the Robbins parcel that are located outside of those previously farmed areas. Because additional water rights would be needed to develop additional irrigable acreage (beyond those already irrigated) within the Robbins parcel (which necessitates application to the Wyoming State Engineer's Office and following an involved process to obtain approval), there are no plans to expand irrigation and farming into such areas that have not already been utilized. Therefore, continued irrigation and farming of established cultivated areas in this case will not cause any new surface ground disturbance in any previously undeveloped lands that might contain any NRHP eligible cultural resources ("historic properties").

Accordingly, continuation of use as proposed within the Robbins boundary is considered (under the National Historic Preservation Act, Section 106 implementing regulations 36 CFR Part 800.d[1]) to be a federal undertaking that would not affect historic properties. This action would be unlikely to affect any cultural resources of a prehistoric archaeological or historical nature. However, if any previously unrecorded archaeological sites are discovered in the project area of potential effects in the future, they should be recorded, evaluated, and assessed with respect to any possible effects to them.

The proposed alternative of renewing the contracts would not change the present cultural resource conditions, so long as irrigation and cultivation areas are not expanded beyond currently

established boundaries, in which case the renewal of such contracts would result only in administrative or financial changes.

#### **Indian Trust Assets**

The United States has an Indian trust responsibility to protect and maintain rights reserved by or granted to Native American tribes or Native American individuals by treaties, statutes, and executive orders. This trust responsibility requires that all Federal agencies take all actions reasonably necessary to protect trust assets. Reclamation's policy is to protect Indian trust assets from adverse impacts of Reclamation programs and activities. Indian trust assets (ITA) are legal interests in property held in trust by the United States for Indian tribes or individuals. Indian trust assets include, but are not limited to, lands, minerals, hunting and fishing rights, and water rights.

In a 1989 Wyoming court case, the Eastern Shoshone and Northern Arapaho Tribes were awarded approximately 500,000 acre-feet of water in the Wind River Basin under reserved water rights with an 1868 priority date. This is the earliest priority date on the Wind River, giving the Tribes the first rights to water in the Wind River.

The Winter's Doctrine, also known as the "implied reservation of water" doctrine, is the mechanism which entitles an Indian tribe to enough water to irrigate its reservation. A tribe cannot lose its "Winter's rights" through nonuse. The Tribes' water rights are protected and are senior to other entities in the Wind River and Bighorn River Basins.

The proposed alternative of renewing the water contract would not affect tribal water rights or other ITA's because the Tribes have the senior water right, therefore, their water rights would be met first in order of priority. Existing water rights junior to the Tribes' water rights would be subject to future development of Native American reserved water rights and the final adjudication of water rights in the Bighorn Basin under the ongoing Bighorn Basin General Adjudication. Renewing the contracts would only result in administrative or financial changes for the Contractors.

#### **Climate Change**

Many climate scientists believe that global climate change is occurring and could lead to many changes in the environment. It is not precisely known what effects would occur, though in general it is believed that there would be increases in temperature and changes in precipitation patterns. Regional climate changes are much less reliable than global ones, and it is unclear whether regional climate will become more variable.

Information for this section was largely taken from Technical Memorandum 86-68210-2013-06 Literature Synthesis on Climate Change Implications for Water and Environmental Resources (Reclamation, 2013b). According to the literature synthesis, temperatures in the northern Great Plains Region generally have risen faster than other areas within the region. The western Great

Plains Region experienced a general decline in spring snowpack, reduced snowfall to winter precipitation ratios and earlier snowmelt runoff. Reduced snowfall to winter precipitation ratios from 1949-2005 were also indicated in the northern Great Plains Region. Recent snowpack changes across western North America and the northwest Great Plains Region are due to regional-scale warming which implies a possible loss of late season snowpack and an earlier melt season. On the other hand, analyses also suggest that, in high-altitude and high-latitude areas, cool-season snowpack actually could increase in the 21<sup>st</sup> century. However, a paper by the Congressional Budget Office indicates that warming will tend to be greater at high altitudes and in the interiors of the United States, and that future climate conditions will feature less snowfall and more rainfall, and that warming will lead to more intense and heavy rainfall that will tend to be interspersed with longer relatively dry periods.

It is unknown precisely what affects climate change, global or regional, would have in the Bighorn Basin. In addition, it is unknown what effects climate changes would have on actions such as entering into long-term water service contracts. However, climate change is not anticipated to affect Reclamation water service obligations. Should the regional (basin) climate measurably or noticeably change under the proposed or no action alternative, Reclamation and the Contractor would adapt to the change.

#### 4. Consultation and Coordination

Because the contract renewal action is financial and administrative in nature, Reclamation believed it only necessary to consult and coordinate with the Contractor. This document is made available as identified at the Locations of Availability below.

#### **Distribution List**

Distribution of the final EA/FONSI will be made to the following entities:

Bureau of Reclamation Great Plains Region

Frank Robbins

Wyoming State Historic Preservation Office

Office of Federal Land Policy (Wyoming Clearinghouse)

#### **Locations of Availability**

The final EA/FONSI will be made available at:

Bureau of Reclamation Wyoming Area Office, 705 Pendell Boulevard, Mills WY 82644

#### **List of Preparers**

This EA/FONSI was prepared by the Bureau of Reclamation, Wyoming Area Office. Listed below are those who made significant contributions to the preparation of the document:

Lyle Myler - Wyoming Deputy Area Manager - document review

 $Laura\ Schwieger\ -\ WYAO\ Environmental\ Specialist-NEPA\ coordinator,\ environmental\ resource\ analysis,\ document\ preparation$ 

 $Brock\ Merrill\ -\ WYAO\ Natural\ Resource\ Specialist\ -\ contract\ negotiations,\ technical\ review,\ document\ preparation$ 

Dale Austin - WYAO Archeologist - document preparation

#### LITERATURE CITED

- Frison, George C. 1991. Prehistoric Hunters of the High Plains, Second Edition. Academic Press, Inc., San Diego, California.
- Love, J.D. and Ann Coe Christiansen

  1985 *Geologic Map of Wyoming*. U.S. Geological Survey, Denver, Colorado.
- National Agricultural Statistics Service (NASS),
  2012. <a href="http://www.nass.usda.gov/Statistics\_by\_State/Wyoming/">http://www.nass.usda.gov/Statistics\_by\_State/Wyoming/</a>
  and <a href="http://www.agcensus.usda.gov/Publications/2012/Full\_Report/Census\_by\_State/Wyoming/index.asp">http://www.agcensus.usda.gov/Publications/2012/Full\_Report/Census\_by\_State/Wyoming/index.asp</a>
- Reclamation, 2013a. U.S. Department of the Interior, Bureau of Reclamation, Reclamation Manual Policy LND P01: Cultural Resources, Office of Policy and Administration, Denver, Colorado.
- Reclamation, 2013b. Technical Memorandum 86-68210-2013-06 Literature Synthesis on Climate Change Implications for Water and Environmental Resources. Third Edition. September 2013, pp. 113-139 and 167-175.

#### ATTACHMENT A



#### **United States Department of the Interior**

URL: www.fws.gov/wyominges/

FISH AND WILDLIFE SERVICE Wyoming Ecological Services Field Office 5353 YELLOWSTONE ROAD, SUITE 308A CHEYENNE, WY 82009 PHONE: 3(07)772-2374 FAX: 3(07)772-2358



Consultation Tracking Number: 06E13000-2015-SLI-0008 Project Name: Frank Robbins Water Service Contract Renewal October 08, 2014

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project.

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the Environmental Conservation Online System-Information, Planning, and Conservation System (ECOS-IPaC) website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

Please feel free to contact us if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. We also encourage you to visit the Wyoming Ecological Services website at <a href="http://www.fws.gov/wyomingss/Pages/Species/Species/Endangered.html">http://www.fws.gov/wyomingss/Pages/Species/Species/Endangered.html</a> for more information about species occurrence and designated critical habitat.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to use their authorities to carry out programs for the conservation of threatened and endangered

species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A biological assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federia actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a biological assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a biological assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the biological assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

We also recommend that you consider the following information when assessing impacts to federally listed species, as well as migratory birds, and other trust resources:

Colorado River and Platte River Systems: Consultation under section 7 of the Act is required for projects in Wyoming that may lead to water depletions or have the potential to impact water quality in the Colorado River system or the Platte River system, because these actions may affect threatened and endangered species inhabiting the downstream reaches of these river systems. In general, depletions include evaporative losses and/or consumptive use of surface or groundwater within the affected basin, often characterized as diversions minus return flows. Project elements that could be associated with depletions include, but are not limited to: ponds, lakes, and reservoirs (e.g., for detention, recreation, irrigation, storage, stock watering, municipal storage, and power generation); hydrostatic testing of pipelines; wells; dust abatement; diversion structures; and water treatment facilities.

Species that may be affected in the Colorado River system include the endangered bonytail (
Gila elegans), Colorado pikeminnow (Pychocheilus lucius), humpback chub Gila cypha), and
razorback sucker (Xyrauchen texanus) and their designated critical habitats. Projects in the
Platte River system may impact the endangered interior population of the least tern (Sterna
antillarum), the endangered pallid sturgeon (Scaphirhynchus albus), the threatened piping
plover (Charadrius melodus), the threatened western prairie fringed orchid (Platanthera
praeclara), as well as the endangered whooping crane (Grus americana) and its designated
critical habitat. For more information on consultation requirements for the Platte River species,
please visit http://www.fws.gov/platteriver.

Migratory Birds: The Migratory Bird Treaty Act (16 U.S.C. 703-712), prohibits the taking of any migratory birds, their parts, nests, or eggs except as permitted by regulations, and does not require intent to be proven. Except for introduced species and some upland game birds, almost all birds occurring in the wild in the United States are protected (50 CFR 10.13). Guidance for

2

minimizing impacts to migratory birds for projects that include communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm.

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d) prohibits knowingly taking, or taking with wanton disregard for the consequences of an activity, any bald or golden eagles or their body parts, nests, or eggs, which includes collection, molestation, disturbance, or killing. Eagle nests are protected whether they are active or inactive. Removal or destruction of nests, or causing abandonment of a nest could constitute a violation of one or both of the above statutes. Projects affecting eagles may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle\_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

If nesting migratory birds are present on or near the project area, timing of activities is an important consideration and should be addressed in project planning. Activities that could lead to the take of migratory birds or eagles, their young, eggs, or nests, should be coordinated with our office prior to project implementation. If nest manipulation (including removal) is proposed for the project, the project proponent should contact the Migratory Bird Office in Denver at 303-236-8171 to see if a permit can be issued for the project. If a permit cannot be issued, the project may need to be modified to protect migratory birds, eagles, their young, eggs, and nests.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

3



#### Official Species List

#### Provided by:

Wyoming Ecological Services Field Office 5353 YELLOWSTONE ROAD, SUITE 308A CHEYENNE, WY 82009 (307) 772-2374\_ http://www.fws.gov/wyominges/

Consultation Tracking Number: 06E13000-2015-SLI-0008

Project Type: Water Supply / Delivery

Project Description: The Bureau of Reclamation is proposing to renew the water service contract with Frank Robbins. Under the contract, Reclamation would continue to provide 160 AF from Boysen Reservoir storage to irrigate 105.9 acres of land approximately 4 miles south of Thermopolis, Wyoming.

http://ecos.fws.gov/ipac, 10/08/2014 10:03 AM

1



#### Project Location Map:



Project Coordinates: MULTIPOLYGON (((-108.1956965 43.6042032, -108.1956751 43.6003994, -108.1955425 43.5965573, -108.2005094 43.5966311, -108.2005094 43.5929993, -108.20567 43.5903668, -108.2055456 43.5898159, -108.2100924 43.6011748, -108.2056186 43.6012012, -108.2055412 43.6041814, -108.1956965 43.6042032)))

http://ecos.fws.gov/ipac, 10/08/2014 10:03 AM 2



Project Counties: Hot Springs, WY

http://ecos.fws.gov/ipac, 10/08/2014 10:03 AM



#### **Endangered Species Act Species List**

There are a total of 2 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the Has Critical Habitat column may or may not lie within your project area. See the Critical habitats within your project area section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Greater sage-grouse (Centrocercus urophasianus)  Population: entire	Candidate		
Flowering Plants			
Ute ladies'-tresses (Spiranthes	Threatened		

http://ecos.fws.gov/ipac, 10/08/2014 10:03 AM 4



#### Critical habitats that lie within your project area

There are no critical habitats within your project area.

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#### **ATTACHMENT B**

#### **ENVIRONMENTAL COMMITMENTS**

The proposed action of renewing the water service contract consisted only of financial and administrative changes. Reclamation has not identified unacceptable adverse environmental effects associated with renewing the water service contract with the Contractor. Therefore, no environmental commitments are necessary.

#### ATTACHMENT C

### LAWS, REGULATIONS, and EXECUTIVE ORDERS ASSOCIATED WITH THE FRANK ROBBINS WATER SERVICE CONTRACT RENEWAL

- 1. **Fish and Wildlife Coordination Act of 1958** The objective of this Act is to provide that wildlife conservation receives equal consideration and is coordinated with other features of water resource development programs. Reclamation will consult and coordinate its programs with the U.S. Fish and Wildlife Service.
- 2. **Endangered Species Act of 1973 (P.L. 93-205)** Section 7 of this Act requires Reclamation to ensure that all federally associated Reclamation activities within the United States do not have adverse impacts on the continued existence of threatened or endangered species or on designated critical habitats. Reclamation will consult with the U.S. Fish and Wildlife Service to determine potential impacts a project may have on protected species.
- 3. National Historic Preservation Act of 1966 (P.L. 89-665), as amended (P.L. 95-515) An evaluation will be conducted prior to any construction activities to determine whether a proposed action will affect sites or structures listed in or eligible for listing in the National Register of Historic Places (National Register). If any are found, it is then determined whether the project effects are adverse.
- 4. **Presidential Memorandum "Government-to-Government Relations with Native American Tribal Governments." April 29, 1994.** Clarifies the responsibility to ensure that the federal government operates within a government-to-government relationship with federally recognized Native American tribes.
- 5. **Reclamation Project Act of 1939** This Act was developed to provide the United States reclamation projects a feasible and comprehensive plan to establish economical repayment obligations to pay construction charges.
- 6. Administration of Contracts Under Section 9, Reclamation Project Act of 1939 (Reclamation Act of 1956) Provides for long-term contract renewal under terms and conditions mutually agreeable to the parties involved.
- 7. **Executive Order 11988** requires each Federal agency to determine whether the proposed action will occur in a flood plain, consider alternatives, and if no practical alternative is found, it requires minimizing harm, notifying the public why the action must be located in the flood plain, and provides for public review and comment. (RI 376) (43 CFR 6030) (RI 215.13)

- 8. **Executive Order 11990** protection of wetlands, provides for a process to improve and coordinate Federal plans, functions, programs, and resource use in a manner to attain beneficial use without impacting on wetlands by requiring the agency head to find that there are no practical alternatives to such construction and that the proposed action includes all practical measures to minimize impacts to wetlands. (RI 376)
- 9. Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." Requires each Federal agency (specifically in EISs) to "provide full and fair discussion of significant environmental impacts and shall inform decision-makers and the public of reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment" (40 CFR §1502.1).
- 10, **Secretarial Order 3226** "Evaluating Climate Change Impacts in Management Planning" dated January 19, 2001. This SO ensures that climate change impacts are taken into account in connection with Departmental planning and decision making.